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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Sandip Sarkar

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EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2416

NOTIFICATION DATE

DELIVERY MODE

06/16/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/823,015	Applicant(s) SARKAR ET AL.	
	Examiner ANH-VU H. LY	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6-13 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 06, 2009 has been entered.

Claim Objections

2. Claim 14 is objected to because of the following informalities:

With respect to claim 14, in line 1, insert --encoded with computer executable instructions-- after "A computer-readable medium" since all computer executable instructions must be stored and/or encoded in a medium for execution.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 6-13 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. *See page 10 of In Re Bilski 88 USPQ2d 1385.*

The instant claims are neither positively tied to a particular machine that accomplishes the

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claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process. Herein, the method claim includes determining, adjusting, determining, and adjusting steps. However, these steps are not tied to an apparatus. Therefore, it is non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 6-13 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Razoumov et al (US Patent No. 6,771,700 B1).

With respect to claims 6 and 18, Razoumov discloses that in a wireless communication system (Fig. 1), a method comprising:

determining a first transmission energy setpoint to achieve a first transmission frame error rate in a first transmission of data (col. 4, lines 31-32, a transmitting station transmits information, contained in frames, with a first energy (E1). Herein, E1 will certainly yield a first transmission frame error rate);

adjusting the transmission energy setpoint on occurrence of a first transmission error (col. 4, lines 36-37, the transmitting station selects a second transmission energy (E2). Herein, E2 is the adjusted first transmission energy setpoint) in the first transmission, wherein the first

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transmission error is received from a receiver (col. 4, lines 34-35, the receiving station reports the first FER1 and identity of those frames received in error back to the transmitting station);

determining a retransmission energy setpoint to achieve a retransmission frame error rate in a retransmission of the data (col. 4, lines 36-37, the transmitting station selects a second transmission energy (E2). Herein, E2 will certainly yield a retransmission frame error rate); and

adjusting the retransmission energy setpoint on occurrence of a retransmission error in the retransmission (col. 7, line 22, adjusted retransmission energy setpoint E3), wherein the retransmission error is received from the receiver (col. 4, lines 34-35, the receiving station reports the first FER1 and identity of those frames received in error back to the transmitting station).

With respect to claims 7 and 19, Razoumov discloses adjusting the retransmission energy setpoint as a function of transmission energy setpoint (col. 7, formula 22, energy setpoint E2 is adjusted based on E1 and its frame error rate).

With respect to claims 8 and 20, Razoumov discloses adjusting the retransmission energy setpoint to achieve a desired frame error rate for retransmission (col. 4, formula 2 and col. 7, formula 22 and 23).

With respect to claims 9 and 21, Razoumov discloses adjusting the first transmission energy setpoint to achieve a desired frame error rate for transmission (col. 6, formula 21).

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With respect to claim 10, Razoumov discloses that wherein the first transmission frame error rate is greater than the retransmission frame error rate (col. 6, formula 21, herein, according to the formula, $f(E1)$ is always greater than $f(E2)$ for any applied numbers).

With respect to claim 11, Razoumov discloses that first wherein the transmission frame error rate and the retransmission frame error rate result in a desired total frame error rate (col. 4, formula 2).

With respect to claim 12, Razoumov discloses that wherein the first transmission frame error rate and retransmission frame error rate are predetermined values (col. 5, lines 5-7, any method of solving the equation 1 subject to a constraint requires the knowledge of a FER as a function of energy. Herein, requiring the knowledge of FER is an indication of a predetermined FER).

With respect to claim 13, Razoumov discloses that wherein the first transmission frame error rate and retransmission frame error rate are dynamic values (col. 4, formula 2. These values are dynamically changed as a function of transmit energies).

Allowable Subject Matter

5. Claims 1-5 are allowed. Claims 14-17 contain the allowable subject matter but objected to for minor informalities.

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The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or fairly suggest determining a first transmission energy setpoint as a function of the first transmission frame error rate and a first transmission quality, wherein the determination of the first transmission energy setpoint is responsive to an update trigger; and determining a retransmission energy setpoint as a function of the retransmission frame error rate and a retransmission quality, wherein the determination of the retransmission energy setpoint is responsive to the update trigger, as specified in independent claims 1 and 14.

Response to Arguments

6. Applicant's arguments filed April 06, 2009 have been fully considered but they are not persuasive.

Applicant argues in page 8 that Razoumov does not appear to have to independently adjustable setpoints used to perform independent steps. Examiner respectfully disagrees. Razoumov discloses (col. 4, lines 36-37) that the transmitting station selects second transmission energy (E2). Herein, E2 is the adjusted first transmission energy setpoint. Further, Razoumov discloses (col. 7, line 22) an adjusted retransmission energy setpoint E3. Herein, E2 and E3 are two independently adjustable setpoints.

Further, Applicant argues in page 8 that Rezoumov discloses adjustments based on occurrences of errors in a different transmission while Applicant claims adjustments based on occurrences of errors in that transmission. Examiner respectfully disagrees. First of all, Examiner's interpretation of a claim is different from Applicant's interpretation of a claim based on the claimed language. Herein, claim 6, in lines 2-3, "to achieve a first transmission frame

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error rate in a first transmission of data". The first transmission of data can occur now or at a later time. Secondly, claim 6 does not recite that the first transmission energy setpoint is continuously determined during a first transmission of data nor the retransmission energy setpoint is continuously determined during a retransmission of data. Therefore, Applicant's argument is not directed to the claimed invention based on the claimed language as interpreted by the Examiner.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANH-VU H. LY whose telephone number is (571)272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anh-Vu H Ly/

Primary Examiner, Art Unit 2416